

Headquarters
US Army Armor Center and Fort Knox
Fort Knox, Kentucky 40121-5000
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Fort Knox Reg 350-7

Training

GROUND MOVEMENT CONTROL POLICY

Summary. This regulation sets forth the Fort Knox policies and procedures for the ground movement of all soldiers and military controlled vehicles on installation roads. Organizational responsibilities are stated so that all parties involved have a clear understanding of the type of planning and support necessary for effective implementation of this policy.

Applicability. This regulation is applicable to all active duty, United States Army Reserve (USAR), and Army National Guard (ARNG) soldiers assigned, attached, or on temporary duty at Fort Knox, Kentucky. It includes all nonmilitary government personnel and contractor employees involved in tracked vehicle operation.

Suggested Improvements. The proponent of this regulation is Operations and Training Division, G3/Directorate of Plans, Training, and Mobilization (G3/DPTM). Users are invited to send suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: CDR, USAARMC and Fort Knox, ATTN: ATZK-PTP-P, Fort Knox, Kentucky 40121-5000.

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1. Purpose. To establish policies governing the safe conduct of all foot marches, and conduct of wheeled and tracked vehicle convoys to ensure the safety of soldiers, civilian employees, and the civilian population on Fort Knox, Kentucky.

2. References.

- a. AR 600-55, The Army Driver and Operator Standardization Program, 31 December 1993.
- b. Fort Knox Regulation 385-10, Force Protection, 13 March 1998.
- c. Fort Knox Regulation 385-22, Range Regulation, 1 December 2000.
- d. Security Classification Guide for Abrams Tank System, 24 July 1997, PEO Abrams Tank System, US Army Tank-Automotive and Armaments Command, Warren, MI.

3. Route Overlay Requirement.

a. Units conducting foot road marches or vehicle convoys using training complex roads/areas to include Wilson and Brandenburg Station Roads will submit route overlays to the Movement Control Center (MCC), Range Operations, 10 working days before the training event. Range Operations will log and number all overlays, and any overlay may be activated by any of the Fort subordinate units within the submitting major command. Units may coordinate/pre-activate overlays by phone, or in person, with the MCC, up to 10 working days before the march. Units must make final coordination NET 24 hours and NLT 2 hours before the execution of the march/convoy.

b. Movement in the cantonment area will be coordinated with the Ft Knox IOC and LEC. Units must notify the IOC/LEC NLT 10 working days before event.

c. Units will provide two copies of each overlay to the MCC for review/approval. The MCC will review overlay, stamp both copies, and return one copy to the unit for the OIC. Overlays will be prepared on overlay/onion skin paper and will identify the following:

- (1) The route
- (2) All break areas, and ambush points (if used)
- (3) An index data block identifying the use of any pyrotechnics, blanks, or gas. (Note. Units identifying use of any portion of a training area or a training complex range or other fixed facility during a march or convoy operation must have that facility scheduled for use.)
- (4) The traffic control points and traffic control measures (TCP/TCM)
- (5) Start Point (SP)
- (6) Release Point (RP)

(7) Check Points (CP)

(8) For vehicle convoys: Elevated speeds beyond posted speed limits for wheeled vehicles must be identified on the overlay. The HET movements must identify convoy speeds, when possible, on all overlays.

d. Units will plan movements for daylight hours and periods of light traffic. Units will avoid traveling at night, during periods of reduced visibility, or during morning and evening rush hours.

e. Bus operations under the direct control of the DBOS are required to submit overlays. Bus movements will be telephonically coordinated with the Movement Control Center a minimum of 1 hour ahead of the planned movement. The dispatch office will also notify the Movement Control Center when the busses begin their convoy.

f. Exception. 1ATB personnel moving from cantonment to Holder complex are not required to submit route overlays for the crossing of Main Range Road, or to activate the march with Range Operations. These movements will not interdict convoys or marches that are on Main Range Road under overlay authority.

g. Cantonment Area. For the purpose of movement control, the cantonment area is the area bounded by Wilson, Frazier and Brandenburg Station Roads, US 31W, and the installation boundary between US 31W and Wilson Road. Main Range Road is part of the training complex.

4. Dismounted Movements.

a. Management of dismounted road marches must provide for the safety of the training personnel and passing traffic. The following procedures assist the OIC in providing a safe environment for training while enabling traffic to continue on the road.

(1) An administrative movement consists of personnel marching in formation. During an administrative movement, the formation will not exceed three abreast on range roads.

(2) A tactical foot march consists of personnel marching along the sides of the road, one column on each side.

(3) Units must locate trail vehicles supporting an administrative or tactical foot march behind the march, maintaining a position near the shoulder of the road to allow traffic to pass.

b. The OIC must have a valid range safety card and be certified for the type of training to be conducted. The duties of the OIC include the following:

- (1) Maintain communications with Range Operations, FM 38.90.
- (2) Maintain an approved risk assessment for the duration of the march. The risk assessment must include data from the MCC on the weather, road conditions, and other events in the area that could affect the march.
- (3) Ensure that all members of a tactical foot march stay on the shoulders of the road, or on paralleling paths. During periods of limited visibility, every fifth soldier must wear PT belt, chem light, or flashlight, displayed to the rear. Only select leaders will walk on the road surface, and they are to remain close to the road shoulder. Personnel involved in a timed or "forced march" type event that are based on either group or individual timed movement will adhere to tactical road march procedures.
- (4) Position advance and rear road guards a minimum of 50 meters from the main body. Road guards will wear safety vest, fully displayed, and use red-lens flashlight when appropriate.
- (5) Ensure vehicles supporting the march stay to the side of the road to allow traffic to pass.
- (6) When a convoy involving oversized wheel or tracked vehicles must pass through a foot road march, the OIC of the foot march will move all personnel off the sides of the road and direct them to observe the approaching convoy. The intent is to ensure that dismounted personnel are aware of the vehicle movement, and able to immediately react to a vehicle involved incident that could threaten dismounted personnel.
- (7) Immediately report serious incidences or elevated risk situations to Range Operations.
- (8) Notify Range Operations when executing all Graphic Control Measures as appropriate.

5. Vehicles.

a. General.

- (1) Definition. A single HET, or other heavy equipment transport vehicle, carrying a load constitutes a convoy. In addition, four or more wheeled vehicles, two or more tracked vehicles, or a combination of three or more wheeled and tracked vehicles in joint movement within a 60-minute period constitute a convoy.
- (2) When crossing or using any civilian roadways the training unit clears the roadway(s) of mud, debris, and/or items such as track pads, end connectors or wedge bolts that may have

fallen off the vehicles in the march. Damage to the roadway, surface signs, or other property will be reported immediately to the Movement Control Center.

b. Wheeled Vehicle Convoy. The OIC of training/Convoy Commander must have a valid range safety card and be certified for the type of training to be conducted. The OIC will:

- (1) Maintain communications with Range Operations, FM 38.90.
- (2) Maintain an approved risk assessment for the duration of the march. The risk assessment must include data from the MCC on the weather, road conditions, and other events in the area that could affect the march.
- (3) Ensure each vehicle has a vehicle commander.
- (4) Before departure, brief all drivers, assistant drivers, and senior occupants on the following:
 - (a) Hazardous conditions
 - (b) Safe following distances
 - (c) Convoy speeds/catch-up speed
 - (d) Route, to include a strip map
 - (e) Signals, call signs, medevac frequency (FM 38.90)
 - (f) Precautions taken at halts
 - (g) Actions taken at intersections, bridges, traffic lights, steep slopes that will be encountered during the march (using low gear), rules for passing through a foot road march area, and for disabled vehicles (see Appendix A for data)
 - (h) Location of nearest medical personnel/combat lifesaver
- (5) Traffic Control requirements
 - (a) Maintain communications with the lead and trail vehicles and Range Operations, FM 38.90.

(b) Ensure that medical personnel/combat lifesavers with bag are scheduled and posted to the rear of the convoy.

(c) Employ advance and rear convoy warning signs and rotating amber warning lights (RAWL) for other traffic.

(d) Notify Range Operations when executing all Graphic Control Measures as appropriate.

(e) Ensure vehicles do not exceed posted speed limits. Requests for "high speed" vehicle movement will be identified in writing and signed by the first Field Grade Commander in the unit's chain of command 10 working days in advance of the movement to Range Operations. Justification of the training event and elevated speeds must be clearly identified.

c. Bus Movement.

(1) Bus operations under the direct control of the DBOS are required to submit overlays. Bus movements will be telephonically coordinated with the Movement Control Center a minimum of 1 hour ahead of the planned movement. The dispatch office will also notify the Movement Control Center when the busses begin their convoy.

(2) Bus movements not supported by DBOS, i.e. unit externally contracted bus, will fall under the same standards as other wheel vehicle convoy operations.

d. Tracked Vehicle Convoy.

(1) Units will adhere to the following guidelines when planning routes for tracked vehicle movement.

(a) Units will not move tracked vehicles on Old Ironsides Avenue between Spearhead Division Avenue (old Seventh Avenue) and Fifth Avenue, 1st Cavalry Regiment Road, 192d Tank Battalion Road, and Sixth Avenue, unless approved by the G3/DPTM in support of ceremonies or installation approved taskings.

(b) Tracked vehicle movements to McFarland-Oliver and Kennedy Ranges should use Main Range Road and Porter River Road, avoiding Eisenhower Road from the gas chamber to the intersection of Main Range and Porter River Road.

(c) Tracked vehicle movements to Donnelly, Boydston, and Steeles Tank Ranges should use Main Range Road.

(d) Tracked vehicle movements to Baum, St. Vith, Cedar Creek, Yano, and any other facility east of Steeles Range should use 7th Armored Division Cut-Off and 7th Armored Division Road.

(e) Tracked vehicles will not enter housing areas on Fort Knox.

(f) Tracked vehicles will not park on Brooks Field without G3/DPTM approval.

(g) All small arms ranges are off limits to tracked vehicles without prior approval from Range Division, G3/DPTM.

(h) When performing target and target device servicing and range clearance on tank ranges, the use of tracked vehicles requires approval of the Chief, Range Division, G3/DPTM.

(i) Administrative bivouac sites are off limits to tracked vehicles. These sites are marked with standard facility signs and used for nontactical, administrative bivouac activities only. Range Division, G3/DPTM will identify established administrative bivouac areas upon user request and justification.

(2) Cantonment area and training complex bridges are posted with the applicable military bridge weight classification. All vehicles must comply with the posted weight limits. (See Appendix A for data.)

(3) Tracked vehicles will not use range facilities (ranges, bivouac sites, etc) for rest or maintenance halts without prior approval from G3 Range Division.

(4) Traffic control for scheduled movements at the US 31W crossing, Highway 60, or Brett Drive intersection will be coordinated at least 3 working days in advance through the MCC, unscheduled movements, such as vehicle recoveries, will be coordinated through the MCC as far in advance as possible. Civilian police are the only agencies authorized to control traffic on public roads, if they are not available, vehicles must obey traffic control devices. Military road-guards are not authorized to stop traffic on public roadways. The Ft Knox PMO is the only authorized point of contact for coordination of off-post police agencies.

(5) The OIC of training/Convoy Commander must have a valid range safety card and be certified for the type of training to be conducted. The OIC will:

(a) Maintain communications with Range Operations.

(b) Maintain an approved risk assessment for the duration of the march. The risk assessment must include data on the weather, road conditions, and other events in the area that could affect the march from the MCC.

(c) Ensure each vehicle has vehicle commander.

(d) Before departure, brief all drivers, assistant drivers, and senior occupants on the following:

1. Hazardous conditions
2. Safe following distances
3. Convoy speeds/catch-up speed
4. Route, to include a strip map
5. Signals, call signs, medevac frequency (FM 38.90)
6. Precautions taken at halts
7. Actions taken at intersections, bridges, traffic lights, steep slopes that will be encountered during the march (using low gear), rules for passing through a foot road march area, and for disabled vehicles (See Appendix A for data.)
8. Location of nearest medical personnel/combat lifesaver

(e) Traffic Control requirements

1. Maintain communications with the lead and trail vehicles and Range Operations.
2. Ensure that medical personnel are scheduled and posted to the rear of the convoy.
3. Employ advance and rear convoy warning signs and rotating amber warning lights (RAWL) for other traffic.
4. Notify Range Operations when executing all Graphic Control Measures as appropriate.
5. Ensure vehicles do not exceed 15 miles per hour. Requests for "high speed" vehicle movement will be identified in writing and signed by the first Field Grade Commander in the units chain of command 10 working days in advance of the movement to Range Operations. Justification of the training event and elevated speeds must be clearly identified.

(f) Necessary permits and clearances to travel on public roadways, i.e., Highway 60 and US 31W, will be obtained by submitting DA Form 1265 (Request For Convoy Clearance) and

DA Form 1266 (Request For Special Hauling Permit) to G4/Directorate of Base Operations (G4/DBOS), ATTN: Unit Movements, 4-4338.

(g) All vehicles must comply with the posted weight limits, slope/grade data, and the applicable military bridge weight classification on all bridges. (See Appendix A for data.)

6. Security.

a. Security of M1 series tanks on Fort Knox will be in accordance with references 2d and 2e above.

b. Tanks removed from motor pools must never be left unattended for any reason and therefore must be under constant observation by a responsible individual (US military, DOD or DA civilian, or US cleared contractor) at all times.

c. Should a tank being moved under its own power become disabled, a responsible individual will stay with the tank until it can be recovered. If the tank is being transported by a HET, and the HET becomes disabled, a responsible individual will remain with the transport vehicle to ensure tank security.

d. Tanks left in a field location or at a display site will be guarded 24 hours a day by a responsible individual.

e. In the event that a tank skirt is damaged during an accident, the following action must be taken:

(1) Check to see if the skin of the skirt has been breeched.

(2) If the damage has caused a breach to the exterior layer of the skirt, the affected area(s) will be covered immediately using blankets, tarps, mud, or other materials to preclude exposed area from observation.

(3) Persons not having a SECRET clearance will be debriefed and sign an inadvertent disclosure oath (see 2d).

(4) The skirt will be evacuated to Boatwright Maintenance Facility or stored in an arms room or other alarmed facility until it is repaired or shipped to the Lima Tank Plant.

(5) A report will be made to the G2/Directorate of Intelligence outlining the actions taken regarding the damaged skirt.

f. Access to the interior and exterior of the tank for display and demonstration purpose will be controlled. Visitors will be under escort by military personnel or DOD civilian knowledgeable of the tank system. Under no circumstances will a tank be left at a display site without a responsible individual being present.

7. Safety.

a. All tracked vehicles will observe a speed limit of 15 miles per hour (mph), with a catch-up speed of 20 mph and slow to 10 mph when passing dismounted troops, on all Ft Knox roads unless prior coordination with Range Division, G3/DPTM, and an exception to policy is granted. Training objectives or test projects requiring tracked vehicles to exceed the 15 mph limit will be identified and justified in memorandum format and submitted NLT 10 working days, if possible, before the training to the Range Division, G3/DPTM.

b. Personnel will not ride on the exterior of tracked vehicles. Track commanders (TCs), loaders, and drivers are required to ride at a "nametag defilade position." All personnel will wear either an issue Combat Vehicle Crewman (CVC) helmet or a Kevlar helmet with earplugs. Personnel supporting vintage vehicle displays will adhere to the uniform requirements established for the event. Personnel participating in authorized Opposing Force activities will wear the appropriate protective headgear identified by the supporting battalion/squadron commander.

c. Commanders will adhere to the guidelines in AR 600-55 and TC 21-306 for the selection and training of tracked vehicle drivers.

d. Each tracked vehicle will have a driver and a track commander (TC) who will ride in the commander's hatch. The TC and driver must be licensed drivers who are experienced and competent in track vehicle operations.

e. Units will not start or run tracked vehicles without a driver seated at the driver's station.

f. The TC and driver of a tracked vehicle must maintain communication while operating the vehicle. Before powering up and moving a track vehicle, the TC will clear all personnel from around the vehicle. In the event of an emergency, the TC will follow all safety precautions described in the technical manual (TM) and unit SOPs pertaining to that particular vehicle. Units will use ground guides to move a track vehicle when communications are inoperable or there is no TC.

g. Units will conduct tracked vehicle emergency evacuation and rollover drills before all missions to ensure crew proficiency. This requirement applies to all who may ride in tracked vehicles.

- h. While operating on any road, vehicles must use lights at all times.
- i. Unless otherwise dictated by tactical situation, personnel operating or riding in vehicles equipped with seat belts will wear the seat belts when the vehicle is moving.
- j. Units will clear, or coordinate for clearing with DBOS, roadways of mud, debris, or items such as track pads and end connectors that fall off vehicles. Units must report damage to roadway, surfaces, signs, or other property immediately to the Directorate of Base Operations Support, 4-1846.
- k. Nontactical tracked vehicle convoys will maintain a gun tube orientation not to exceed the width of the vehicle. For tactical road marches, tracked vehicle gun tube orientation may exceed the width of the vehicle if coordinated with Range Division, Operations Branch, G3/DPTM. Coordination may be by any means, including radio.
- l. Military road-guards may not stop, control, or direct traffic on public roadways. If needed, Ft Knox PMO will be the only agency to coordinate with civilian police agencies.
- m. Units must use road-guards when crossing roads where the oncoming traffic has the right-of-way (US 60 and State HWY 1638 for movement between adjacent range areas (i.e. 5N)). Position road-guards to provide oncoming traffic a warning and ample time to recognize the road-guard and to stop within a safe distance without heavy/panic braking. Road-guards, when used, must wear high visibility devices when controlling military traffic. In addition, flashlights, chem lights, or flares must be used during periods of darkness or when visibility is otherwise reduced to 500 feet or less.
- n. Units must use a braking vehicle when towing ABRAMS tanks as per TM.
- o. When crossing bridges, units must center tracked vehicles on bridge, maintain a uniform speed not to exceed 8 mph and minimum spacing of 100 feet, and not stop or turn.
- p. When crossing bridges while towing tracked vehicles, units must center tracked vehicles on bridge, have only one towing vehicle at a time on bridge, maintain a uniform speed not to exceed 5 mph, and not stop or turn. If vehicle in tow exceeds the posted weight limit of bridges, roads, etc., alternate routes must be taken.
- q. Identify vehicles that break down along roads to traffic by reflectors/flares 100 meters to the front/rear until recovery is complete.
- r. Units must secure accident scenes with a guard for Class A and B accidents (fatality, permanent total or partial disability, three or more personnel hospitalized, \$200,000 or more

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damage, and vehicle fires). Leave all vehicles and equipment in place until released by the Armor Branch Safety Office.

8. Additional Instructions. Exceptions to policy, resolutions of conflicts, and cases not covered will be submitted to the Chief, Operations and Training Division, G3/DPTM and the IOC, for staffing and approval on a case-by-case basis.

FOR THE COMMANDER:



ROBERT L. BROOKS
Director, Information Management

OFFICIAL:
ROBERT T. GAHAGAN
Colonel, GS
Chief of Staff

DISTRIBUTION:
A

Appendix A

Bridge Weight Classifications and Slope of Hills

1. The following bridges are properly marked at each approach:

Porter River Rd over Mill Creek	100 Ton all vehicles
Main Range Rd over Mill Creek	100 Ton all vehicles
Bottom of ski slope	Track 54 Ton, Wheel 76 Ton
Poorman Range Rd	Track 66 Ton, Wheel 80 Ton
Brumfield Range Rd (Lincoln Bridge)	Track 15 Ton, Wheel 16 Ton
Brumfield Range Rd, Steeles Range	Track 13 Ton, Wheel 16 Ton
7 th AR Div Rd before Lower Douglas Lake	120 Ton all vehicles
Intersection Steeles Range Rd & 7 th AR Div Rd	Track 51 Ton, Wheel 73 Ton

2. Only marked east side approach:

Bridge over Cedar Creek	Track 100 Ton, Wheel 115 Ton
- Action submitted to gain proper marking	

3. Special Note:

Bridge over the Salt River: Based on a DBOS review of the design and construction data on the Salt River Bridge, the following weight limits are established for the bridge.

Weight Classification: 120 Tons for a single track vehicle, and 100 Tons per vehicle for a convoy having an approx spacing of 100 ft clear vehicle to vehicle based on single lane, one-way traffic. This does not support an M1 or an M88 towing an M1.

Action submitted to gain proper marking.

4. The following is the average slope at the steepest section of each hill:

Misery Hill on Porter River Road	13.6%
Agony Hill on Main Range Road	17.2%
Seventh Armored Div Rd @ Sanders Spring Reservoir	11.0%
Seventh Armored Div Rd (Steeles Range Rd - Main Range Rd)	11.2%
Cedar Creek Range Rd (Old Highway 251 - Kelly Road)	17.4%
Kelly Road (Access Road to Yano)	15.0%
Cedar Creek Range Entrance Rd @ Old Highway 251	10.3%
Main Range Road south of Mill Creek Bridge	19.3%
Main Range Road north of Mill Creek Bridge	19.3%
Kennedy Hill	16.0%
745th Tank Bn Way Hill	18.4%
North side of Salt River Bridge	11.0%
South side of Salt River Bridge	6.8%